

ABSTRACT

A method of cleaning a fouled RO membrane in a module for RO separation, the membrane having feed side and permeate side, the foulant accumulating at the feed side. The cleaning method comprises:

- 5 - feeding concentrated saline solution to the feed side of the RO membrane under the high gauge pressure of the normal RO separation process;
- 10 - feeding dilute saline solution to the permeate side of the RO membrane under higher pressure than the permeate pressure of the normal RO process, so that a net driving differential ΔPN is directed to the feed side, whereby the solvent is being sucked from the permeate side to the feed side, penetrates into the interface between the membrane and the accumulated foulant, and separates the foulant from the membrane surface; and
- 15 - withdrawing the concentrated saline solution together with the separated foulant and the penetrated solvent from the feed side of the RO membrane.